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5244-0051-2X DIV RSID 1-154-8 (DIV)

#### IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

TETSURO MOTOYAMA

: EXAMINER: LUU, L.

SERIAL NO: 08/738,659

CPA FILED: APRIL 4, 2000

: GROUP ART UNIT: 2152

FOR: METHOD AND SYSTEM FOR DIAGNOSIS AND CONTROL OF MACHINES USING

CONNECTION AND CONNECTIONLESS MODES OF COMMUNICATION

#### DECLARATION UNDER 37 C.F.R. § 1.132

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

SIR:

I, Carlton P. Tolsdorf, Jr., hereby declare:

- I am the Managing Director/ Chief Technical Officer of International Telecommunications
   Initiatives, LLC., and my mailing address is 1700 Briar Ridge Road, McLean, Virginia 22101.
- 2. My academic background is as follows:

Bachelor of Electrical Engineering degree from Pratt Institute;

Master of Science degree in Systems Analysis from George Washington University; and

Coursework toward Ph.D. in Expert Systems from George Washington University.

3. My industry experience is as follows:

I have approximately 27 years of professional experience in the Information and Telecommunications industries, with the most notable positions as follows:

### • International Telecommunications Initiatives, LLC., McLean, VA (1992 – Present)

Managing Director/Chief Technical Officer – Design, technology selection, integration, operations and fielding of information system and related technologies / networks (turn key) in Emerging Market Countries. Provide technical, engineering and operational expertise to the integrated financial data communication systems based upon Vsat, fiber optic transmission, switching and routing systems used in a Network for the major financial institutions of Jordan involving some 2000 remote nodes / operations; international and local area network designs. Created wireless operating businesses in the Caribbean, Pacific RIM and South America using PCS; ESMR; VSAT and International Satellite Gateway technologies.

#### • CPT Associates, Inc., McLean, VA (1990-Present)

President/CEO - Founded a high technology professional engineering company with specific focus on Information Technology, financial market transactions and telecommunications network design, financing, implementation /operations. Design and implementation of Information networks using VSAT technology to deliver Internet and related e-mail services in China, Middle East and for the Island Council of St Marrten. Designed and implemented multimedia network for 26 overseas and 110 domestic locations for a classified customer. Formulated professional services of CPT Associates to provide professional high technology

services to major law firms in the United States. (Arnold & Porter, Jones, Day, Reavis and Pogue).

### • Condor Systems, Inc., McLean, VA (1985-1990)

<u>Director, Washington Business Development Center</u> - Responsible for major requirements definition, design, prototyping, development and production of specialized systems for covert RF intercept equipment and for the AN-ALR-81 receiving system.

### • Central Intelligence Agency (CIA), McLean, VA (1981-1985)

Senior Program Manager - Design, development, implementation and operations of integrated telecommunications / information systems network supporting a \$1.6B classified program.

R&D to address methods of encryption of E-mail traffic and to develop effective methods of covert intercept of e-mail and ftp data over international covert communication systems. Counterintelligence intercept and processing system designs using commercial technology and modifying the printed wiring boards to add certain covert functionality (re-transmission of electronic information, integration of miniature surveillance devices). Design, implementation and operational support for some 110 US missions and consulates around the globe for advanced information systems networks (local, wide band, covert).

Naval Sea Systems Command, Arlington, VA (1973-1981)
 Senior Program Manager - Worked on Alohanet (Navy's R&D intercomputer network for R&D centers and Operating commands), a part of the Arpanet, using email to phase out and

replace analog HF messaging methods for exchange of information between facilities (low bandwidth) between facilities. Responsible for Undersea Warfare acoustic sensor and related information system Research & Development directing the efforts of some 325 professionals (engineers, scientists and software developers in some \$25M in projects per year).

- 4. In preparing this declaration, I have read and understand at least the following documents pertaining to the above-identified patent application: (1) the patent application (U.S. Serial No. 08/738,659); (2) the Official Action dated January 11, 2001; (3) the Official Action dated July 18, 2000; (4) the response to the Official Action of July 18, 2000 which was filed on October 18, 2000; and (5) the latest version of the claims including added claims 68-87, as set forth in a Preliminary Amendment to be filed in the Patent Office. I have also read the following patent documents: Kraslavsky et al. (U.S. Patent No. 5,537,626, hereinafter Kraslavsky), Cohn et al. (U.S. Patent No. 5,740,231, hereinafter Cohn), and Banno et al. (U.S. Patent No. 4,876,606, hereinafter Banno).
- It is my understanding that the priority date of the above-identified patent application is June 5,
   1995.
- 6. In my opinion, the Official Action dated January 11, 2001 identifies the art of the prior art references to be the Data Processing art.
- 7. In my opinion, the level of ordinary skill in the Data Processing art is a person having at least a Bachelor's degree in the Data Processing art and at least two to three years of experience in the Data Processing art.

- 8. Even though my level of skill in the Data Processing art is higher than one of ordinary skill, I feel comfortable rendering an opinion on what one of ordinary skill in the Data Processing art would feel at the time of the presumptive date of invention.
- 9. The <u>Kraslavsky</u> patent discloses a narrow framework of monitoring and monitored devices which are located within a self-contained network. In the Abstract, <u>Kraslavsky</u> specifically states that his invention is directed to a method and apparatus for interfacing a printer to a Local Area Network (LAN) by using a Small Computer System Interface (SCSI) for transmitting print data to the printer and for receiving printer status data from the printer. <u>Kraslavsky</u> does not teach, disclose, or suggest the use of electronic mail or Internet electronic mail.
- 10. In <u>Kraslavsky</u> at col. 7, lines 38-63, a Wide Area Network is also described, as illustrated in Figure 2, as including a server S1 40 coupled to a backbone 50 over a bus 52, wherein "the backbone 50 is nothing more than an electrical connection between a plurality of buses." In col. 7, lines 56-63, <u>Kraslavsky</u> states,

If the printer 78 is equipped with a NEB according to the present invention, a direct communication link can be established between the PC 42 and the printer 78 whereby job information can be sent to the printer 78, and status and control information can be sent from printer 78 to the LAN 41. Therefore, the NEB according to the present invention achieves its enhanced functionality even when installed in a peripheral coupled to a WAN.

Further, in col. 16, lines 1-11, <u>Kraslavsky</u> discloses transmitting large quantities of data both to and from the printer, and designing the NEB to ensure that the NEB is responsive to both the

- network and the printer on a near real-time basis. It is also evident that the *interactive* nature of the NEB is important to <u>Kraslavsky</u>, as shown in col. 21, lines 6-15.
- 11. The <u>Cohn</u> patent discloses a system interconnecting various messaging systems such as voicemail, fax, email, etc. See e.g., the Abstract, Figure 1, and col. 1 lines 1-30. These messaging systems have disparate capabilities and use disparate communication protocols.

  Abstract. All of the messages exchanged in <u>Cohn</u> are originated form a human and intended for a human as the end recipient. In order to have intercommunication of the messages having native formats which use disparate communication protocols, the messages are converted to a standard internal message format and utilize an "Internet style address." Col. 15, line 65 col. 16, line 41.
- 12. The <u>Cohn</u> patent, e.g., in col. 30, lines 55-67, discloses a messaging system between people who subscribe to a closed system. The system described separates subscribers from non-subscribers, whereas a general Internet electronic mail system does not distinguish between subscribers and non-subscribers. Also, as recited in Claim 1 of <u>Cohn</u>, the user profiles in database storage are critical to the system of <u>Cohn</u>. The system updates the user profile among the hubs that use the database for operation, as shown in Figure 10. The availability of the user profile is an important feature of the system of <u>Cohn</u>, whereas Internet electronic mail, in contrast, does not require keeping a user profile. The locations of the sender and destination are likely to be found in the last hierarchy of the DNS server. The DNS information at the lowest level is not replicated among the hubs in the system as in <u>Cohn</u>. Normally, intermediate

systems between the sender and the receiver do not have any information about the user nor have any need to store the user profile. Thus, <u>Cohn</u> is directed to a much narrower framework than one that supports Internet electronic mail.

- 13. It has been acknowledged by the Examiner that neither <u>Cohn</u> nor <u>Kraslavsky</u> individually disclose a system having a business office device which diagnosis and/or controls and/or monitors an office device such as a business office device using email or Internet electronic mail. However, the important issue to address is whether it would have been obvious to combine <u>Cohn</u> and <u>Kraslavsky</u> to achieve a system having a business office device which diagnosis and/or controls and/or monitors an office device such as a business office device using email or Internet electronic mail.
- 14. It is my opinion that one of ordinary skill in the art, at the time of June of 1995, having before him the teachings of <u>Cohn</u> and <u>Kraslavsky</u>, would never combine the teachings of these patents to achieve a system having a device or machine which transmits electronic mail containing information from sensors.

# A. <u>Email Is Too Slow and Not Interactive Enough to be Utilized in the System of Kraslavsky</u>

It is my opinion that one of ordinary skill in the art, having before him both <u>Kraslavsky</u> and <u>Cohn</u>, would not modify the teachings of <u>Kraslavsky</u> to use the email format of <u>Cohn</u> because in June of 1995, one of ordinary skill in the art would believe that email is too slow and not interactive enough to be utilized in the system of <u>Kraslavsky</u>. Interactivity between a controlling computer and a printer is essential to the system disclosed in <u>Kraslavsky</u>. This is evident from the Background section of the

Kraslavsky patent which discloses at col. 1, line 64-col. 2, line 2 that a major drawback of the prior art or known devices is their lack of a bi-directional interface between the printer and the network, such bi-directional interface allowing the printer to export a large quantity of very specific printer status data to the network. The Summary of the Invention of Kraslavsky explains at col. 2, lines 2-22, that the invention provides a bi-directional interface "so that large quantities of specific peripheral status information (and other information) may be exported from the peripheral to the local area network and so that control information may be transferred from the local area network to the peripheral." Also, the "interactive" nature of the invention is emphasized at col. 2, lines 17-20. Moreover, col. 6, lines 37-44 emphasize a system having "the ability to offer a wide variety of status and control features to the network," and also the ability of "exercising printer front panel functions from the PC 14."

It is acknowledged that <u>Kraslavsky</u> not only discloses that his invention may be utilized with a local area network, but may also be applied to a Wide Area network. Col. 7, lines 38-41. With such a wide area network, "a direct communication link can be established between the PC 42 and the printer 78 whereby job information can be sent to printer 78, and status and control information can be sent to the printer 78 to the LAN 41." Col. 7, lines 55-61. Moreover, it is emphasized that the system of <u>Kraslavsky</u> can produce "fine control of a printer from a remote location such as remotely displaying front panel information at a remote location," and also allow the control of the printer front panel to be activated from the remote location. Col. 8, lines 24-35.

Based on the above teachings of <u>Kraslavsky</u>, it is my opinion that one of ordinary skill in the art would never modify <u>Kraslavsky</u> to utilize an Internet email format or to utilize Internet email with

Kraslavsky. In June of 1995, if an Internet email format or an Internet email communication system were utilized by the Kraslavsky system, one of ordinary skill in the art would believe that an important or essential function (rapid and interactive communication between the printer and controlling computer) of Kraslavsky would be removed. Therefore, one of ordinary skill in the art would not be motivated to modify Kraslavsky to utilize email as such a modification would destroy important features of Kraslavsky.

B. Cohn Teaches the Use of Internet Email Format When There Is

A Problem With Diverse Communication Protocols and Formats:

Kraslavsky Does Not Use Such Diverse Protocols and Formats

The <u>Cohn</u> patent discloses at col. 15, line 65 - col. 16, line 41 the format of transmitted messages. Because of different formats of the various type of messages, all messages are encapsulated in a standard message wrapper to form a message for transport and storage within the communication system. Col. 16, lines 11-17. These messages may utilize Internet style addresses. Col. 16, line 30. Thus, the teachings of the message format of <u>Cohn</u> is that when diverse communication formats or media types are utilized, an Internet style format or encapsulation may be utilized to provide a universal protocol over which diverse messages from humans to humans can be transmitted.

It is my opinion that one of ordinary skill in the art, seeing that <u>Kraslavsky</u> does not have diverse types of communication protocols or messages, would not encapsulate information transmitted within <u>Kraslavsky</u> in an Internet email format. Therefore, it is my opinion that one of ordinary skill in the art would not modify <u>Kraslavsky</u> to utilize the message format disclosed in <u>Cohn</u>. In <u>Kraslavsky</u>, there is simply no need or desire to utilize an encapsulated message format such as an Internet email format.

## C. The Examiner's Rational of Modifying Kraslavsky to Allow the Global Transfer of Messages is Weak

Throughout the rejection, the Examiner has indicated that the motivation for modifying

Kraslavsky to use an Internet electronic mail message format of Cohn is because it would allow the message to be transferred globally between devices. In Kraslavsky, the disclosed system interfaces to a printer using a SCSI bus and interface. See Figure 3 of Kraslavsky. The specification also explains that the Network Expansion Board

("NEB") can also serve additional SCSI devices such as other printers and peripherals. Kraslavsky at col. 8, lines 4-8. Thus, Kraslavsky is capable of performing all desired communication using the SCSI communication format, and a global communication between the peripherals and computer can already occur. It is my opinion that the Examiner's motivation to allow the message to be transferred globally is simply not an issue or problem in Kraslavsky and it is unclear what exactly the Examiner means by a global transfer, and what devices machines he is envisioning in the statement of motivation.

## D. The Combination of Cohn and Kraslavsky Does Not Result in the Claimed Invention

The Office Action mailed January 11, 2001, in section 5 which spans pages 2 and 3 never explains or acknowledges the differences between the prior art and the claimed invention. Specifically, Cohn does not teach the use of Internet electronic mail, but teaches the use of an Internet email *format* on what appears to be a private network, and not the Internet. It would not be apparent to one of ordinary skill in the art to utilize the Internet with Cohn or Kraslavsky, because neither of these patents discloses the use of the Internet. Moreover, no printer known as of 1995, or cited by the Examiner

discloses the use of the Internet to control and/or monitor and/or diagnose a printer. Therefore, for the Claims which require the use of the Internet, there is nothing in the cited prior art which actually discloses the Internet.

## E. It Is Not Clear From the Office Action How the Combined System Of Kraslavsky and Cohn Would Operate

The relevant teachings of <u>Cohn</u> include the use of a standard message wrapper which encapsulates *all* received message data with the standard message wrapper. <u>Cohn</u> at col. 16, lines 12-18. Thus, if the teachings of the message format disclosed in <u>Cohn</u> were applied to the system of <u>Kraslavsky</u>, *all* communications between the printer and a controlling computer would have an Internet electronic mail message format. However, such a system does not make sense and would not be obtained or constructed by one of ordinary skill in the art. If all messages to the printer in <u>Kraslavsky</u> were constructed in accordance with a common wrapper and utilize an Internet email format, <u>Kraslavsky</u> would transmit the print jobs or data to be printed to the printer using such electronic mail format. In my opinion, it certainly would not have been practical or obvious to transmit all communications in <u>Kraslavsky</u> which go to the printer utilizing an email format because such an email format was not thought of as a good way to transmit print data to a printer in June of 1995. As of today, I know of no printer in which all communications to the printer are in email format.

If the Examiner is constructing a system using a combination of <u>Cohn</u> and <u>Kraslavsky</u> which does not transmit the data to be printed in an Internet email format, then the Examiner is apparently creating some type of hybrid system in which certain messages are encapsulated in an Internet email

format, and others, such as print data are not. However, I see no reasons why one of ordinary skill in the art would be motivated to come up with such a hybrid system.

- 16. For at least the reasons set forth above, it is my opinion that one of ordinary skill in the art would not combine the teachings of <u>Kraslavsky</u> with <u>Cohn</u> and the Internet, in the manner done by the Examiner.
- 17. I have reviewed <u>Banno</u> and it is my opinion that there is nothing in this patent which would suggest or allow the teachings of <u>Kraslavsky</u> to be combined with <u>Cohn</u>.
- I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by a fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date

Carlton P. Tolsdorf, Jr.

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